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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/663,209

09/16/2003

Donald A. Baines

Agere-6 (Baines 1-3-7)

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26479

7590

02/14/2006

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EXAMINER

PHAM, TAMMY T

ART UNIT

PAPER NUMBER

2675

DATE MAILED: 02/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/663,209

Applicant(s)

BAINES ET AL.

Examiner

Tammy Pham

Art Unit

2675

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5 and 12-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Knee et al. (US Patent No: 5,994,710).

As for claims 1 and 12, Knee teaches of a method comprising:

a) capturing a plurality of image parts in column 3, lines 37-38;

b) determining position information corresponding to each of the plurality of image parts;

and

c) generating image information using, at least, the plurality of image parts and the corresponding position information in column 12, lines 49-53.

As for claims 2 and 13, Knee teaches of the method of claim 1 wherein the position information includes coordinate information in column 12, lines 49-53.

As for claims 3 and 14, Knee teaches of the method of claim 1 wherein the position information includes change of position information in column 11, line 64.

As for claim 4, Knee teaches of the method of claim 1 wherein the act of capturing a plurality of image parts includes focusing light reflected from a surface onto an imaging device, and

wherein the act of determining position information includes accepting, by the imaging device, light reflected from the surface in column 6, lines 18-20.

As for claim 5, Knee teaches of the method of claim 4 wherein the light reflected from the surface is emitted from a single light source in column 6, lines 18-20.

As for claims 15-17, Knee teaches of the apparatus of claim 12 wherein the position information includes orientation information {claim 15}; acceleration information {claim 16} and velocity information {claim 17} in column 1, lines 40-45.

As for claim 18, Knee teaches of the apparatus of claim 12 wherein the means for capturing a plurality of image parts includes

- 1) a light source, and
- 2) an imaging device, and wherein the means for determining position information includes

- 1) the light source, and
- 2) the imaging device in column 6, lines 10-30.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6-11 and 19-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knee et al. (US Patent No: 5,994,710) in view of Anderson et al. (US Patent No: 6,657,184 B2).

As for claims 6 and 10, Knee teaches that the light reflected from the surface is emitted from a first light source wherein the light emitted from the first light source and reflected from the surface onto the imaging device is used in the act of capturing a plurality of image parts and determining position information in column 6, lines 18-20.

Knee does not teach of a second light source.

Anderson teaches of the light emitted from the second light source (27) in Fig. 3 and in column 6, lines 44-49.

It would have been obvious to one with ordinary skill in the art at the time the invention was made to include a second light source (27) as taught by Anderson with the image capturing apparatus of Knee in order to have another light source that functions with another optical navigation circuit in order to accomplish varying tasks (see Anderson: column 6, lines 44-48).

As for claims 7, 11 and 20, Knee teaches of the method of claim 6 wherein the light emitted from the first light source.

Knee does not teach that the angle of incidence of the first light source is larger than that of the second light source.

Anderson teaches that the first light source has a larger angle of incidence with the surface than the light emitted from the second light source in Fig. 3.

It would have been obvious to one with ordinary skill in the art at the time the invention was made to have the angle of incident of the first light source be larger than that of the second light source as taught by Anderson with the image capturing apparatus of Knee in order to provide a different field of view and orientation (see Anderson: column 3, lines 55-60).

As for claim 8, Knee teaches of the method of claim 1 wherein the act of capturing a plurality of image parts includes focusing light reflected from a surface onto a first imaging device in column 6, lines 18-20.

Anderson teaches of the act of determining position information includes focusing light reflected from the surface onto a second imaging device in Fig. 3 and in column 6, lines 44-49. Please note that the applicant does not indicate in the specification or the drawings where or what constitutes the second imaging device, examiner will take the second imaging device to be the combination of the first imaging device or imaging device with the second light source. In which case, Anderson's apparatus in including the second light source with an imaging device constitutes as the second imaging device.

As for claim 9, Knee teaches of the method of claim 8 wherein the light reflected from the surface is emitted from a single light source in column 6, lines 18-20.

As for claims 19, 24 and 25, Knee teaches of the apparatus of claim 12 wherein the means for capturing a plurality of image parts includes: 1) a first light source, and 2) an imaging device in column 5, lines 20-25.

Anderson teaches of a second light source and/or a second imaging device in Fig. 3 and column 6, lines 44-49.

As for claims 21-22, Knee teaches that the apparatus of claim 19 wherein the second light source is a light emitting diode {claim 21}; infra-red light emitting diode {claim 22} in column 5, lines 20-25.


As for claim 23, Anderson teaches of the second light source is a tunable light source able to modulate at least one of wavelength, polarization, and amplitude in column 6, lines 44-65.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tammy Pham whose telephone number is (571) 272-7773. The examiner can normally be reached on 8:00-5:30 (Mon-Fri).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Tammy Pham
January 25, 2006


SUMATI LEFKOWITZ
SUPERVISORY PATENT EXAMINER